109TH CONGRESS 1ST SESSION

S. 745

To amend the Global Environmental Protection Assistance Act of 1989 to promote international clean energy development, to open and expand clean energy markets abroad, to engage developing nations in the advancement of sustainable energy use and climate change actions, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 11, 2005

Mr. BYRD (for himself, Mr. Jeffords, Mr. Kerry, and Mr. Bingaman) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

A BILL

To amend the Global Environmental Protection Assistance Act of 1989 to promote international clean energy development, to open and expand clean energy markets abroad, to engage developing nations in the advancement of sustainable energy use and climate change actions, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

1 SECTION 1. SHORT TITLE.

_	2_01_01\ 1\ 2_10_1\ 1\ 2_10_1\ 1
2	This Act may be cited as the "International Clean
3	Energy Deployment and Global Energy Markets Invest-
4	ment Act of 2005".
5	SEC. 2. PURPOSES.
6	The purposes of this Act are—
7	(1) to strengthen the cooperation of the United
8	States with developing countries in addressing crit-
9	ical energy needs and global climate change;
10	(2) to promote sustainable economic develop-
11	ment, increase access to modern energy services, re-
12	duce greenhouse gas emissions, and strengthen en-
13	ergy security and independence in developing coun-
14	tries through the deployment of clean energy tech-
15	nologies;
16	(3) to facilitate the export of clean energy tech-
17	nologies to developing countries;
18	(4) to reduce the trade deficit of the United
19	States through the export of United States energy
20	technologies and technological expertise;
21	(5) to retain and create manufacturing and re-
22	lated service jobs in the United States;
23	(6) to integrate the objectives described in para-
24	graphs (1) through (5) in a manner consistent with
25	interests of the United States, into the foreign policy

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of the United States;

1	(7) to authorize funds for clean energy develop-
2	ment activities in developing countries; and
3	(8) to ensure that activities funded under part
4	C of title VII of the Global Environmental Protec-
5	tion Assistance Act of 1989 (as added by section 3)
6	contribute to economic growth, poverty reduction,
7	good governance, the rule of law, property rights,
8	and environmental protection.
9	SEC. 3. CLEAN ENERGY TECHNOLOGY DEPLOYMENT IN DE-
10	VELOPING COUNTRIES.
11	Title VII of the Global Environmental Protection As-
12	sistance Act of 1989 (Public Law 101–240; 103 Stat.
13	2521) is amending by adding at the end the following:
14	"PART C—CLEAN ENERGY TECHNOLOGY
15	DEPLOYMENT IN DEVELOPING COUNTRIES
16	"SEC. 731. DEFINITIONS.
17	"In this part:
18	"(1) CLEAN ENERGY TECHNOLOGY.—The term
19	'clean energy technology' means an energy supply or
20	end-use technology that, over its lifecycle and com-
21	pared to a similar technology already in commercial
22	use in any developing country—
23	"(A) is reliable, affordable, economically
24	viable, socially acceptable, and compatible with
25	the needs and norms of the host country;

1	"(B) results in—
2	"(i) reduced emissions of greenhouse
3	gases; or
4	"(ii) increased geological sequestra-
5	tion; and
6	"(C) may—
7	"(i) substantially lower emissions of
8	air pollutants; and
9	"(ii) generate substantially smaller or
10	less hazardous quantities of solid or liquid
11	waste.
12	"(2) Department.—The term 'Department'
13	means the Department of State.
14	"(3) Developing country.—
15	"(A) IN GENERAL.—The term 'developing
16	country' means any country not listed in Annex
17	I of the United Nations Framework Convention
18	on Climate Change, done at New York on May
19	9, 1992.
20	"(B) Inclusion.—The term 'developing
21	country' may include a country with an econ-
22	omy in transition, as determined by the Sec-
23	retary.
24	"(4) Geological sequestration.—The term
25	'geological sequestration' means the capture and

1	long-term storage in a geological formation of a
2	greenhouse gas from an energy producing facility,
3	which prevents the release of greenhouse gases into
4	the atmosphere.
5	"(5) Greenhouse gas.—The term 'greenhouse
6	gas' means—
7	"(A) carbon dioxide;
8	"(B) methane;
9	"(C) nitrous oxide;
10	"(D) hydrofluorocarbons;
11	"(E) perfluorocarbons; and
12	"(F) sulfur hexafluoride.
13	"(6) Institution of higher education.—
14	The term 'institution of higher education' has the
15	meaning given the term in section 101(a) of the
16	Higher Education Act of 1965 (20 U.S.C. 1001(a)).
17	"(7) Interagency working group.—The
18	term 'Interagency Working Group' means the Inter-
19	agency Working Group on Clean Energy Technology
20	Exports established under section 732(b)(1)(A).
21	"(8) National Laboratory.—The term 'Na-
22	tional Laboratory' means any of the following lab-
23	oratories owned by the Department of Energy:
24	"(A) Ames Laboratory.
25	"(B) Argonne National Laboratory.

1	"(C) Brookhaven National Laboratory.
2	"(D) Fermi National Accelerator Labora-
3	tory.
4	"(E) Idaho National Engineering and En-
5	vironmental Laboratory.
6	"(F) Lawrence Berkeley National Labora-
7	tory.
8	"(G) Lawrence Livermore National Lab-
9	oratory.
10	"(H) Los Alamos National Laboratory.
11	"(I) National Energy Technology Labora-
12	tory.
13	"(J) National Renewable Energy Labora-
14	tory.
15	"(K) Oak Ridge National Laboratory.
16	"(L) Pacific Northwest National Labora-
17	tory.
18	"(M) Princeton Plasma Physics Labora-
19	tory.
20	"(N) Sandia National Laboratories.
21	"(O) Stanford Linear Accelerator Center.
22	"(P) Thomas Jefferson National Accel-
23	erator Facility.

1	"(9) QUALIFYING PROJECT.—The term 'quali-
2	fying project' means a project meeting the criteria
3	established under section 735(b).
4	"(10) Secretary.—The term 'Secretary'
5	means the Secretary of State.
6	"(11) State.—The term 'State' means—
7	"(A) a State;
8	"(B) the District of Columbia;
9	"(C) the Commonwealth of Puerto Rico;
10	and
11	"(D) any other territory or possession of
12	the United States.
13	"(12) Strategy.—The term 'Strategy' means
14	the strategy established under section 733.
15	"(13) Task force.—The term 'Task Force'
16	means the Task Force on International Clean En-
17	ergy Cooperation established under section 732(a).
18	"(14) United states.—The term 'United
19	States', when used in a geographical sense, means
20	all of the States.
21	"SEC. 732. ORGANIZATION.
22	"(a) Task Force.—
23	"(1) Establishment.—Not later than 90 days
24	after the date of enactment of this part, the Presi-

1	dent shall establish a Task Force on International
2	Clean Energy Cooperation.
3	"(2) Composition.—The Task Force shall be
4	composed of—
5	"(A) the Secretary, who shall serve as
6	Chairperson; and
7	"(B) representatives, appointed by the
8	head of the respective Federal agency, of—
9	"(i) the Department of Commerce;
10	"(ii) the Department of the Treasury;
11	"(iii) the Department of Energy;
12	"(iv) the Environmental Protection
13	Agency;
14	"(v) the United States Agency for
15	International Development;
16	"(vi) the Export-Import Bank;
17	"(vii) the Overseas Private Investment
18	Corporation;
19	"(viii) the Trade and Development
20	Agency;
21	"(ix) the Small Business Administra-
22	tion;
23	"(x) the Office of United States Trade
24	Representative; and

1	"(xi) other Federal agencies, as deter-
2	mined by the President.
3	"(3) Duties.—
4	"(A) Lead agency.—The Task Force
5	shall act as the lead agency in the development
6	and implementation of strategy under section
7	733.
8	"(B) COORDINATION AND IMPLEMENTA-
9	TION.—The Task Force shall support the co-
10	ordination and implementation of programs
11	under sections 1331, 1332, and 1608 of the
12	Energy Policy Act of 1992 (42 U.S.C. 13361)
13	13362, 13387).
14	"(4) Termination.—The Task Force, includ-
15	ing any working group established by the Task
16	Force, shall terminate on January 1, 2016.
17	"(b) Working Groups.—
18	"(1) Establishment.—The Task Force—
19	"(A) shall establish an Interagency Work-
20	ing Group on Clean Energy Technology Ex-
21	ports; and
22	"(B) may establish other working groups
23	as necessary to carry out this part.

1	"(2) Composition of interagency working
2	GROUP.—The Interagency Working Group shall be
3	composed of—
4	"(A) the Secretary of Energy, the Sec-
5	retary of Commerce, and the Administrator of
6	the United States Agency for International De-
7	velopment, who shall jointly serve as Chair-
8	persons; and
9	"(B) other members, as determined by the
10	Task Force.
11	"(c) Interagency Center.—
12	"(1) Establishment.—There is established an
13	Interagency Center in the Office of International
14	Energy Market Development of the Department of
15	Energy.
16	"(2) Duties.—The Interagency Center shall—
17	"(A) assist the Interagency Working
18	Group in carrying out this part; and
19	"(B) perform such other duties as are de-
20	termined to be appropriate by the Secretary of
21	Energy.
22	"SEC. 733. STRATEGY.
23	"(a) Initial Strategy.—
24	"(1) IN GENERAL.—Not later than 1 year after
25	the date of enactment of this part, the Task Force

1	shall develop and submit to the President a Strategy
2	to—
3	"(A) support the development and imple-
4	mentation of programs and policies in devel-
5	oping countries to promote the adoption of
6	clean energy technologies and energy efficiency
7	technologies and strategies, with an emphasis
8	on those developing countries that are expected
9	to experience the most significant growth in en-
10	ergy production and use over the next 20 years;
11	"(B) open and expand clean energy tech-
12	nology markets and facilitate the export of
13	clean energy technology to developing countries,
14	in a manner consistent with the subsidy codes
15	of the World Trade Organization;
16	"(C) integrate into the foreign policy objec-
17	tives of the United States the promotion of—
18	"(i) clean energy technology deploy-
19	ment and reduced greenhouse gas emis-
20	sions in developing countries; and
21	"(ii) clean energy technology exports;
22	"(D) establish a pilot program that pro-
23	vides financial assistance for qualifying
24	projects; and

1	"(E) develop financial mechanisms and in-
2	struments (including securities that mitigate
3	the political and foreign exchange risks of uses
4	that are consistent with the foreign policy of
5	the United States by combining the private sec-
6	tor market and government enhancements)
7	that—
8	"(i) are cost-effective; and
9	"(ii) facilitate private capital invest-
10	ment in clean energy technology projects in
11	developing countries.
12	"(2) Transmission to congress.—On receiv-
13	ing the Strategy from the Task Force under para-
14	graph (1), the President shall transmit to Congress
15	the Strategy.
16	"(b) UPDATES.—
17	"(1) In general.—Not later than 2 years
18	after the date of submission of the initial Strategy
19	under subsection (a)(1), and every 2 years there-
20	after—
21	"(A) the Task Force shall—
22	"(i) review and update the Strategy;
23	and
24	"(ii) report the results of the review
25	and update to the President; and

1	"(B) the President shall submit to Con-
2	gress a report on the Strategy.
3	"(2) Inclusions.—The report shall include—
4	"(A) the updated Strategy;
5	"(B) a description of the assistance pro-
6	vided under this part;
7	"(C) the results of the pilot projects car-
8	ried out under this part, including a compara-
9	tive analysis of the relative merits of each pilot
10	project;
11	"(D) the activities and progress reported
12	by developing countries to the Department
13	under section 736(b)(2); and
14	"(E) the activities and progress reported
15	towards meeting the goals established under
16	section $736(b)(2)$.
17	"(c) Content.—In developing, updating, and sub-
18	mitting a report on the Strategy, the Task Force shall—
19	"(1) assess—
20	"(A) energy trends, energy needs, and po-
21	tential energy resource bases in developing
22	countries; and
23	"(B) the implications of the trends and
24	needs for domestic and global economic and se-
25	curity interests;

1	"(2) analyze technology, policy, and market op-
2	portunities for international development, dem-
3	onstration, and deployment of clean energy tech-
4	nologies and strategies;
5	"(3) examine relevant trade, tax, finance, inter-
6	national, and other policy issues to assess what poli-
7	cies, in the United States and in developing coun-
8	tries, would help open markets and improve clean
9	energy technology exports of the United States in
10	support of—
11	"(A) enhancing energy innovation and co-
12	operation, including energy sector and market
13	reform, capacity building, and financing meas-
14	ures;
15	"(B) improving energy end-use efficiency
16	technologies (including buildings and facilities)
17	and vehicle, industrial, and co-generation tech-
18	nology initiatives; and
19	"(C) promoting energy supply technologies,
20	including fossil, nuclear, and renewable tech-
21	nology initiatives;
22	"(4) investigate issues associated with building
23	capacity to deploy clean energy technology in devel-
24	oping countries, including—
25	"(A) energy-sector reform:

1	"(B) creation of open, transparent, and
2	competitive markets for clean energy tech-
3	nologies;
4	"(C) the availability of trained personnel to
5	deploy and maintain clean energy technology;
6	and
7	"(D) demonstration and cost-buydown
8	mechanisms to promote first adoption of clean
9	energy technology;
10	"(5) establish priorities for promoting the diffu-
11	sion and adoption of clean energy technologies and
12	strategies in developing countries, taking into ac-
13	count economic and security interests of the United
14	States and opportunities for the export of technology
15	of the United States;
16	"(6) identify the means of integrating the prior-
17	ities established under paragraph (5) into bilateral,
18	multilateral, and assistance activities and commit-
19	ments of the United States;
20	"(7) establish methodologies for the measure-
21	ment, monitoring, verification, and reporting under
22	section 736(b)(2) of the greenhouse gas emission im-
23	pacts of clean energy projects and policies in devel-
24	oping countries;

- "(8) establish a registry that is accessible to the public through electronic means (including through the Internet) in which information reported under section 736(b)(2) shall be collected;
 - "(9) make recommendations to the heads of appropriate Federal agencies on ways to streamline Federal programs and policies to improve the role of the agencies in the international development, demonstration, and deployment of clean energy technology;
 - "(10) make assessments and recommendations regarding the distinct technological, market, regional, and stakeholder challenges necessary to deploy clean energy technology;
 - "(11) recommend conditions and criteria that will help ensure that funds provided by the United States promote sound energy policies in developing countries while simultaneously opening their markets and exporting clean energy technology of the United States;
 - "(12) establish an advisory committee, composed of representatives of the private sector and other interested groups, on the export and deployment of clean energy technology;

1	"(13) establish a coordinated mechanism for
2	disseminating information to the private sector and
3	the public on clean energy technologies and clean en-
4	ergy technology transfer opportunities; and
5	"(14) monitor the progress of each Federal
6	agency in promoting the purposes of this part, in ac-
7	cordance with—
8	"(A) the 5-year strategic plan submitted to
9	Congress in October 2002; and
10	"(B) other applicable law.
11	"SEC. 734. CLEAN ENERGY ASSISTANCE TO DEVELOPING
12	COUNTRIES.
13	"(a) In General.—Subject to section 736, the Sec-
14	retary may provide assistance to developing countries for
15	activities that are consistent with the priorities established
16	in the Strategy.
17	"(b) Assistance.—The assistance may be provided
18	through—
19	"(1) the Millennium Challenge Corporation es-
20	tablished under section 604(a) of the Millennium
21	Challenge Act of 2003 (22 U.S.C. 7703(a));
22	"(2) the Global Village Energy Partnership;
23	and
24	"(3) other international assistance programs or
25	activities of—

1	"(A) the Department;
2	"(B) the United States Agency for Inter-
3	national Development; and
4	"(C) other Federal agencies.
5	"(c) Eligible Activities.—The activities sup-
6	ported under this section include—
7	"(1) development of national action plans and
8	policies to—
9	"(A) facilitate the provision of clean energy
10	services and the adoption of energy efficiency
11	measures;
12	"(B) identify linkages between the use of
13	clean energy technologies and the provision of
14	agricultural, transportation, water, health, edu-
15	cational, and other development-related services;
16	and
17	"(C) integrate the use of clean energy
18	technologies into national strategies for eco-
19	nomic growth, poverty reduction, and sustain-
20	able development;
21	"(2) strengthening of public and private sector
22	capacity to—
23	"(A) assess clean energy needs and op-
24	tions:

1	"(B) identify opportunities to reduce,
2	avoid, or sequester greenhouse gas emissions;
3	"(C) establish enabling policy frameworks;
4	"(D) develop and access financing mecha-
5	nisms; and
6	"(E) monitor progress in implementing
7	clean energy and greenhouse gas reduction
8	strategies;
9	"(3) enactment and implementation of market-
10	favoring measures to promote commercial-based en-
11	ergy service provision and to improve the govern-
12	ance, efficiency, and financial performance of the en-
13	ergy sector; and
14	"(4) development and use of innovative public
15	and private mechanisms to catalyze and leverage fi-
16	nancing for clean energy technologies, including use
17	of the development credit authority of the United
18	States Agency for International Development and
19	credit enhancements through the Export-Import
20	Bank and the Overseas Private Investment Corpora-
21	tion.
22	"SEC. 735. PILOT PROGRAM FOR DEMONSTRATION
23	PROJECTS.
24	"(a) In General.—Not later than 2 years after the
25	date of enactment of this part, the Secretary, in consulta-

1	tion with the Secretary of Energy and the Administrator
2	of the United States Agency for International Develop-
3	ment, shall, by regulation, establish a pilot program that
4	provides financial assistance for qualifying projects con-
5	sistent with the Strategy and the performance criteria es-
6	tablished under section 736.
7	"(b) Qualifying Projects.—To be qualified to re-
8	ceive assistance under this section, a project shall—
9	"(1) be a project—
10	"(A) to construct an energy production fa-
11	cility in a developing country for the production
12	of energy to be consumed in the developing
13	country; or
14	"(B) to improve the efficiency of energy
15	use in a developing country;
16	"(2) be a project that—
17	"(A) is submitted by a firm of the United
18	States to the Secretary in accordance with pro-
19	cedures established by the Secretary by regula-
20	tion;
21	"(B) meets the requirements of section
22	1608(k) of the Energy Policy Act of 1992 (42
23	USC 13387(k)).

1	"(C) uses technology that has been suc-
2	cessfully developed or deployed in the United
3	States; and
4	"(D) is selected by the Secretary without
5	regard to the developing country in which the
6	project is located, with notice of the selection
7	published in the Federal Register; and
8	"(3) when deployed, result in a greenhouse gas
9	emission reduction (when compared to the tech-
10	nology that would otherwise be deployed) of at
11	least—
12	"(A) in the case of a unit or energy-effi-
13	ciency measure placed in service during the pe-
14	riod beginning on the date of enactment of this
15	part and ending on December 31, 2009, 20 per-
16	centage points;
17	"(B) in the case of a unit or energy-effi-
18	ciency measure placed in service during the pe-
19	riod beginning on January 1, 2010, and ending
20	on December 31, 2019, 40 percentage points;
21	and
22	"(C) in the case of a unit or energy-effi-
23	ciency measure placed in service after December
24	31, 2019, 60 percentage points.
25	"(c) Financial Assistance.—

1	"(1) IN GENERAL.—For each qualifying project
2	selected by the Secretary to participate in the pilot
3	program, the Secretary shall make a loan or loan
4	guarantee available for not more than 50 percent of
5	the total cost of the project.
6	"(2) Interest rate on a
7	loan made under this subsection shall be equal to
8	the current average yield on outstanding obligations
9	of the United States with remaining periods of ma-
10	turity comparable to the maturity of the loan.
11	"(3) Host country contribution.—To be
12	eligible for a loan or loan guarantee for a project in
13	a host country under this subsection, the host coun-
14	try shall—
15	"(A) make at least a 10 percent contribu-
16	tion toward the total cost of the project; and
17	"(B) verify to the Secretary (using the
18	methodology established under section
19	733(c)(7)) the quantity of annual greenhouse
20	gas emissions reduced, avoided, or sequestered
21	as a result of the deployment of the project.
22	"(4) Capacity building research.—
23	"(A) IN GENERAL.—A proposal made for a
24	qualifying project may include a research com-

1	ponent intended to build technological capacity
2	within the host country.
3	"(B) Research.—To be eligible for a loan
4	or loan guarantee under this paragraph, the re-
5	search shall—
6	"(i) be related to the technology being
7	deployed; and
8	"(ii) involve—
9	"(I) an institution in the host
10	country; and
11	"(II) a participant from the
12	United States that is an industrial en-
13	tity, an institution of higher edu-
14	cation, or a National Laboratory.
15	"(C) Host country contribution.—To
16	be eligible for a loan or loan guarantee for re-
17	search in a host country under this paragraph,
18	the host country shall make at least a 50 per-
19	cent contribution toward the total cost of the
20	research.
21	"(5) Grants.—
22	"(A) IN GENERAL.—The Secretary, in con-
23	sultation with the Secretary of Energy and the
24	Administrator of the United States Agency for
25	International Development, may, at the request

1	of the United States ambassador to a host
2	country, make grants to help address and over-
3	come specific, urgent, and unforeseen obstacles
4	in the implementation of a qualifying project.
5	"(B) MAXIMUM AMOUNT.—The total
6	amount of a grant made for a qualifying project
7	under this paragraph may not exceed
8	\$1,000,000.
9	"SEC. 736. PERFORMANCE CRITERIA FOR MAJOR ENERGY
10	CONSUMERS.
11	"(a) Identification of Major Energy Con-
12	SUMERS.—Not later than 1 year after the date of enact-
13	ment of this part, the Task Force shall identify those de-
14	veloping countries that, by virtue of present and projected
15	energy consumption, represent the predominant share of
16	energy use among developing countries.
17	"(b) Performance Criteria.—As a condition of
18	accepting assistance provided under sections 734 and 735,
19	any developing country identified under subsection (a)
20	shall—
21	"(1) meet the eligibility criteria established
22	under section 607 of the Millennium Challenge Act
23	of 2003 (22 U.S.C. 7706), notwithstanding the eligi-
24	bility of the developing country as a candidate coun-

1	try under section 606 of that Act (22 U.S.C. 7705);
2	and
3	"(2) agree to establish and report on progress
4	in meeting specific goals for reduced energy-related
5	greenhouse gas emissions and specific goals for—
6	"(A) increased access to clean energy serv-
7	ices among unserved and underserved popu-
8	lations;
9	"(B) increased use of renewable energy re-
10	sources;
11	"(C) increased use of lower greenhouse
12	gas-emitting fossil fuel-burning technologies;
13	"(D) more efficient production and use of
14	energy;
15	"(E) greater reliance on advanced energy
16	technologies;
17	"(F) the sustainable use of traditional en-
18	ergy resources; or
19	"(G) other goals for improving energy-re-
20	lated environmental performance, including the
21	reduction or avoidance of local air and water
22	quality and solid waste contaminants.

1 "SEC. 737. AUTHORIZATION OF APPROPRIATIONS.

- 2 "There are authorized to be appropriated such sums
- 3 as are necessary to carry out this part for each of fiscal

4 years 2006 through 2015.".

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